Weathering The Storm: Community Capital & Hospitality and Tourism Disaster Resiliency

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Introduction

Restaurants and hotels in the Hospitality & Tourism industry (HTM) generate $9.3 trillion dollars to the world economy, account for 10% of U.S. GDP, and have a payroll exceeding $167 billion US dollars. Natural disasters threaten the already fragile thread of

HTM survival (reported mortality rates of 20-90% in the 1st five years of opening).
HTMs' competitive advantage is frequently the result of exceptional geological locations, thus increasing their risk of exposure to natural disasters.

Little is known about HTM business survival after natural disasters.

The effects of community capital (resources) on family and individual resilience has been documented in other studies (Danes, Stafford, & Haynes, 2008; Mayunga, 2007). Community capital may have a significant effect on business resilience.

Previous HTM studies are:1) Primarily case studies; 2) limited in geographic scope; 3) include only a single disaster; 4) implement atheoretical analyses.

Objectives

Aim: Understand the factors that **enhance resilience** of hospitality and tourism industry after natural disasters

The problem: We have **no generalizable quantitative estimates** of the effects of natural disasters on the industry.

The Solution: Develop a **theory-based model of HTM resilience** as a function of community capital.

Objective [1]: Estimate the effects of natural disasters on hospitality and tourism industry resilience.

Objective [2]: Estimate the impact of community capital (resources) on hospitality and tourism industry resilience.

Data

All 983 counties in the North Central Region (Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio and South Dakota)
***Years 1997 - 2000.**

Data Sources
The Following data sources were merged to crate a new, first-of-its-kind dataset:

HTM business information: County Business Patterns from U.S. Census

Natural disasters measures: Spatial Hazard and Events Losses Data (SHELDUS) from University of South Carolina

Community capital measures: social capital from Northeast Regional Center for Rural Development (NERCRD) at Pennsylvania State University, human, economic, physical, and natural capital from NC-1030

Theoretical Frame

General Systems Theory (Boulding, 1956)
Systems interact via the exchange of capitals, resources.

Sustainable Livelihoods Approach (Department for International Development, 2001)
Capitals either positively or negatively impact peoples' livelihood outcomes.

Capital Approach (Mayunga, 2007)
The more capital a community possesses the higher their propensity for resiliency.

Variables/Analysis

Dependent Variables

Resiliency Measures
Change in # businesses; annual payroll; # jobs for Foodservice and Hotel segments of HTM industry

Independent Variables

Community Capital

Human	% College educated
Social	Voter participation rate
Economic	HH median income
Natural	Natural amenity rank
Physical	Property tax $

Natural Disasters
# of disasters
$ damage

Analysis

Multiple Regression in SPSS
One-tailed tests

RESULTS:

Predictors of HTM Industry Resiliency

- **Community capital impacts industry resiliency**
- **Economic and physical capitals consistently predict industry resiliency in both segments**
- **Natural disasters affect aggregate survival for restaurants, but not for hotels**

Significant Effects of Capital on HTM Industry	Δ # Firms Hospitality /Tourism	Δ Payroll (H)/(T)	Δ Jobs (H)/(T)
Economic	(H) +/(T)+	(H) +/(T)-	H +/(T)+
Human	(H) +/(T)+	(H) +/(T)-	(H)+/(T)-
Physical	(H) -/(T)+	(H) +/(T)+	(H) -(T)+
Natural	(H)+	(H) +/(T)-	

References

Boulding, KE. (1956). General systems theory - The skeleton of science. *Management Science*, 2(3), 197-208.

International Strategy for Disaster Reduction. (2001). Fact Sheet-International Strategy for Disaster Reduction. http://www.unisdr.org/eng/public_aware/world_camp/2006-2007/faq-en.htm, accessed on March 11, 2007.

Danes, S., Stafford, K., Haynes, G. (2008). The Effect of Exposure to Risk from a Natural Disaster on Family Business Survival and Success. *NSF GRANT # CMS-0625326,* 1-17.

Mayunga, J. (2007). Understanding and applying the concept of community disaster resilience: a capital-based approach. *Summer Academy for Social Vulnerability and Resilience Building,* 1-16.

Acknowledgments

This poster would not have been possible without the advice of Dr. Kathryn Stafford and Dr. Rob Scharff and my committee members Dr. Jay Kandampully and Dr. Michael Tews. Some of the results reported used data from Cooperative Regional Research Project NC-1030, which was partially supported by U.S.D.A, Baruch College, and experiment stations at the University of Hawaii, Purdue University (Indiana), Iowa State University, Oklahoma State University, University of Minnesota, Montana State University, Cornell University (New York), North Dakota State University, The Ohio State University, Utah State University, and the University of Wisconsin.

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